

Title (en)
ADJUSTABLE FACE PLATE FOR HYDRAULIC PUMP OR MOTOR

Title (de)
EINSTELLBARE SPIEGELPLATTE FÜR EINE HYDRAULISCHE PUMPE ODER MOTOR

Title (fr)
PLAQUE AVANT REGLABLE POUR POMPE OU MOTEUR HYDRAULIQUE

Publication
EP 1068450 B1 20030917 (EN)

Application
EP 99913745 A 19990406

Priority
• NL 9900198 W 19990406
• NL 1009607 A 19980710
• US 5627198 A 19980407

Abstract (en)
[origin: WO9951881A1] The invention relates to a hydraulic axial piston pump, motor or pressure transformer with a plurality of fluid chambers in the rotating cylinder block (6). The volume of the fluid chambers (7) changes between a minimum value (discharge) and a maximum value (suction) during each rotor (6) cycle. The rotatable face plate (8) can be adjusted by means of a transmission to an adjusting shaft (9) whereby the effective stroke volume is changed. Suction and discharge ports (14) are located in the rotatable face plate (8) thereby allowing controlled overlap of discharge openings to reduce energy losses due to high pressure fluid discharged at high speed through small openings, which improves efficiency of the pump.

IPC 1-7
F04B 1/20; F04B 1/30

IPC 8 full level
F04B 1/24 (2006.01); **F03C 1/253** (2006.01); **F04B 1/20** (2006.01); **F04B 1/30** (2006.01); **F04B 1/32** (2006.01)

CPC (source: EP)
F04B 1/2042 (2013.01); **F04B 1/303** (2013.01)

Cited by
DE102014207158A1; US10094365B2

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
WO 9951881 A1 19991014; DE 69911386 D1 20031023; DE 69911386 T2 20040701; EP 1068450 A1 20010117; EP 1068450 B1 20030917; JP 2002510773 A 20020409

DOCDB simple family (application)
NL 9900198 W 19990406; DE 69911386 T 19990406; EP 99913745 A 19990406; JP 2000542578 A 19990406